

	A	B	C	D
1	1	1	1	2
2	2	2	2	3
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	5	5	5	5
7	5	5	5	5
8	5	5	5	6
9	6	6	6	6
10	6	7	7	7
11	7	8	8	8
12	8	8	9	9
13	9	9	9	10
14	10	10	10	10
15	11	11	11	11
16	12	12	12	12
17	12	12	13	13
18	13	13	13	14
19	14	14	14	15
20	15	P1	P1	P1
21	P1	P1	P1	P1
22	P1	P1	P1	P1
23	C	C	C	C
24	C	C	C	C
25	C	C	C	C

GENETICS
FREEZER
(LOWER LEFT CORNER)

	A	B	C	D
1C	2C	3C	4C	
5C	6C	7C	8C	
9C	10C	11C	12C	
12C(6)	13C	14C	15C	
I C	II C	III C	SI C	
S2C	S3C	S4C	S5C	
S6C	S7C	S8C	S9C	
S10C	P1C	P2C		
IP	2P	3P	4P	
5P	6P	8P	9P	
9P	10P	11P	12P	
I	S1P	S2P	S2	
S2	S2	S3P	S4P	
S4	S4	S4	S5P	
S5	S5	S5	S6P	
S6	S6	S6	S7	
S7	S7	S7	S7	
S8	S8	S9	S10	
S10	S10	S10	S10	

STOCK PAVILION
FREEZER
(NEAR RIGHT)

CONTROL
SERAS
(non-immune)

POOLED
+
HOMOLYSED
SERAS
(coli)

SALMONELLA
SERAS

S1-6 = d
S7, S8 = 1, 2, 3
S9, S10 = i

ANTISERA IN STORAGE

Ink entries = 5-10 cc quantities
Pencil entries = 1-2 cc "

Prefixes: P = phage
S = Salmonella
none = coli

Suffixes: C = control
P = Pooled trial bleeding

TITERS

S7 = $\frac{1}{2560}$ (slide aggl)
S10 = $\frac{1}{320}$ (")
S1-6 = $> \frac{1}{20,480}$.

3/2 - 4/13/53

E. coli typing via Kauffmann-EnningSEROTYPEAgglut. Test.

	H*	O	K	H	O	K
K12						
Wg 1	+	-	-	wg 41	wg (G)	077
11	-	-	X	92		31
12	.			93	+4	CK,
13	FG pool			4	26 (21:)	
14	.	K 19:		45	+	077
15	+1,12			46	+7?	0%
16	AC pool			47	+13	3(23)
17				48	(F) pool	081
18				49		X
19	H		K 19:	50		
20	+7			3	-	08
21	AC pool			4	-	group C(NK)
22	.		X	B	-	-
23	+					
24	+9					
25	.					
26	+1					
27	.					
28	.					
29	FG pool					
30	+27					
31			-			
32			X			
33	+4:	021	55, 9, 28	4	17	
34			X 28	5	8	
35	(E) pool			6	-	
36		09	55, 9, 32	7	2	
37	+26(14)	09, 18	X 3	8	-	
38			X	9	12	
39	+	04 (18)	K12	10	8	
40	+	07		11	15	
					16	

Legend
 H+ swarm but not agglut.
 X tried but neg.

* form swarms at 37°

(+) slight, secondary agglut.
 (-) no agglut.

	H	O	K	swarming
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

no agg. titers determined

33 H 7 types
 12 4 O 5 known
 60 K known

Fertile KK cultures

DATE: 2/55

REF:

ϕ = possible phage lysis

SRP tests of KK cultures
= Ewing's 1/8 prototypes 2
of EM L505

Each tested against W1177(F-) and W1817(F+)
on EMS mal.
+ - refer to mal reaction.

KK #	First trial	Second trial	Comment
1	no SRPs (0)		
2	no SRPs (0)		
3	1 mal- \bar{c} 1817	0	
4	no SRPs (0)		
5	no SRPs; confluent mal + on control plate		
6	no SRPs; 4+ on control plate		
7	0		
8	\bar{c} 1817, ca 150 protos, ++- Many mal + on control, 0 \bar{c} 1177	\bar{c} 1817 ca 200, ++-	Appears to be fertile, F-
9	0		
10	ca 100 col, ++-, on control + \bar{c} 1177; 1+ \bar{c} 1817	\bar{c} 1817, 1-	
11	4+ \bar{c} 1817	\bar{c} 1817, 1-	
12	0		
13	0		
14	0		
15	Control 1+; 1177 0; 1817 10+, 8-	control 1+, 1- 1177 0 1817 1+, 2-	
16	+ & - on all plates	ca 20-30 col, +, -, on all plates	KK culture found to be mixed w respect to mal
17	\bar{c} 1817, ca 60 col, +, -, v		
18	\bar{c} 1817, 1+, 1-	\bar{c} 1817, 2+	
19	\bar{c} 1817, ca 100, ++-	ϕ	Appears to be fertile, F-
20	\bar{c} 1817, 3+, 6-	0	
21	0		
22	\bar{c} 1817, 1+, 16-, 1v		
23	0		
24	0		
25	control, 1+ 1817, 12 v(?)	0	
26	control, 1- (?) 1817, ca 250, +, -, v.	ϕ	Appears to be fertile, F-

SRP tests of KK cultures

<u>KK ♂</u>	<u>First trial</u>	<u>Second trial</u>	<u>Comment</u>
27	control 1+ 1817 ca 600, +, -, v	φ	Appears to be fertile, F-
28	1817 1-	1177 1+ 1817 ca 200, all small -	?
29	0		
30	0		
31	1817 ca 100, +, -, v	φ	Appears to be fertile, F-
32	0		
33	1817 ca 50, + + -		Appears to be fertile, F-
34	0		
35	1817 "slow gummy, φ ca 200 -		Appears to be fertile, F-
36	1817 ca 500, + + -		Appears to be fertile, F-
37	1817 1+	1817 1+	
38	1817 ca 150, + + -	φ	Appears to be fertile, F-
39	1817 ca 1000, + + -	φ	Appears to be fertile, F-
40	1817 ca 50, + + -		Appears to be fertile, F-
41	control 2+		
42	0		
43	Control, smear, + + - 1177 " 1+ 1817 ca 150, + + -	φ	Control: several very small - 1177: 3 mil + or v 1817 ca 200, +, -, v
44	0		Probably fertile
45	0		
46	0		
47	0		
48	1817, 2+, 7-		
49	1817 2+	0	
50	1817 1+	0	
51	0		
52	1817 1+, 1-	0	

SRP tests of KK cultures

KK #	First trial	Second trial	Comment
53	0		
54	1817, ca 200, + + - control 1 -	control 1 + n sl 1177 0 -	Appears to be fertile; F -
55	1817 6 +, 4 -	1817 ca 100 -	Probably fertile *
56	1177 6 +	0	
56	1817 12 +		
57	1817 ca 200 +, 10 -	.	Appears to be fertile; F -
58	Control 200 +		
59	1817 1. -	0	
60	0		

119a	= 1051	metabolite lact	Suc	Mal	x 1177	x 1490	x 1802	wg 24
#	115	1048	-	-	✓	0	0	
	112	1045.	-	+	0	0	0	
	124	= 1053	absorbs metabolite	+	0	✓		

Lact ± metabolite Cells

129d	1056	-	-	-	✓	wg 25
131a	1057	+	+	0	(+) <u>2+1-</u>	
170c	1081	±	+	✓	W	wg 26
	1074	+	+		1-2	
	1080	±	+		1-1	

1063 (143a) Same as 055: B5 type

What ecological features on the most* types?

1052 121e - (143a) ^{1063 - inconsistent reaction: Same for all test} Mal - "rough" Lac unstable?

127a

135b

145a

151b

Miller - U. of Chi.

11-30-51

all AR
EMS and SM

	<u>loc</u>	<u>cl</u>	<u>ave</u>	<u>ck</u>	<u>med</u>	<u>SM</u>
1297	1	(+) del	-	-	+	S
1298	2		-	-	+	S
1299	3		-	-	+	S
1300	4		-	-	+	S
1301	5		-	-	+	S
1302	6		-	-	+	S
1303	7		-	-	+	S
1304	8		-	-	+	S
1305	9		-	-	+	S
1306	10		-	-	+	S
1307	11		-	-	+	S
1308	12		-	-	+	S
1309	13		-	-	+	S
1310	14		-	-	+	S
1311	15		-	-	+	S
1312	16		-	-	+	S
1313	17		-	-	+	S
1314	18		-	-	+	S
1315	19		-	-	+	S
1316	20		-	-	+	S
1317	21		-	-	+	S
1318	22		-	-	+	S
1319	23		-	-	+	S
1320	24		-	-	+	S
1321	25		-	-	+	S
1322	26		-	-	+	S
1323	27		-	-	+	S
1324	28		-	-	+	S
1325	29		-	-	+	S
1326	30		-	-	+	S
1327	31		-	-	+	S
1328	32	(+) del	-	-	+	S
1329	33		-	-	+	S
1330	34		-	-	+	S
1331	35		-	-	+	S
1332	36		-	-	+	S
1333	37		-	-	+	S
1334	38		-	-	+	S
1335	39		-	-	+	S
1336	40		-	-	+	S
1337	41		-	-	+	S
1338	42		-	-	+	S
1339	43		-	-	+	S
1340	45	del +	-	-	+	S
1341	46	del +	-	-	+	S
1342	47	del +	-	-	+	S
1343	48	del +	-	-	+	S
1344	49	del +	-	-	+	S
1345	50	del +	-	-	+	S
1346	51	del +	-	-	+	S
1347	52	del +	-	-	+	S

4+, 2-(?)
2+, 2 del 3-9-52 cross & control gave = no SRP

Wg 44

Wg 45 (fertile = W1817)

plate crowded, - and del + within 2nd in third trials (11-7-52, 3-9-52)

1 del

	<u>Miller, U. of Chi.</u>		11-30-51					
	<u>loc</u>	<u>cl-</u>	<u>acc</u>	<u>ck</u>	<u>mal</u>	<u>SM</u>	<u>EMS</u>	<u>mal SM</u>
1348	53	el+	+	-	-	S		
1349	54	el+	+	-	-	S		
1350	55	el+	+	-	-	S		
1351	56	el+	+	-	-	S		
1352	57	el+	+	-	-	S		
1353	58	el+	+	-	-	S		
1354	59	el+	+	-	-	S		
1355	60	el+	+	-	-	S		
1356	61	el+	+	-	-	S		
1357	62	el+	+	-	-	S		
1358	63	el+	+	-	-	S		
1359	64	el+	+	-	-	S		
1360	65	el+	+	-	-	S		
1361	66	+	+	-	-	S		
1362	67	el+	+	-	-	S		
1363	68	el+	+	-	-	S		
1364	69	el+	+	-	-	S		
1365	70	el+	+	-	-	S		
1366	71	el+	+	-	-	S		
1367	72	el+	+	-	-	S		
1368	73	el+	+	-	-	S		
1369	74	el+	+	-	-	S		
1370	75	+	+	-	-	S		
1371	76	+	+	-	-	S		
1372	77	+	+	-	-	S		
1373	78	+	+	-	-	S		
1374	79	+	+	-	-	S		
1375	80	el+	+	-	-	S		
1376	81	el+	+	-	-	S		
1377	82	el+	+	-	-	S		
1378	83	el+	+	-	-	S		
1379	84	el+	+	-	-	S		
1380	85	el+	+	-	-	S		
1381	86	el+	+	-	-	S		
1382	87	el+	+	-	-	S		

1396

Benham, Chicago

12-4-51

- 1383 P-2826
 1384 97466
 1385 P-103312
 1386 P-315797
 1387 P-349584
 1388 P-395659
 1389 409468 u
 d 1390 P-430208
 1391 P-444266
 1392 P-448851
 1393 P-484064
 1394 P-497502 (2)
 1395 P-497502
 1396 P-524147
 1397 P-528421
 1398 P-534103
 1399 P-536140
 1400 P-536484
 1401 P-537830 u
 1402 537880 u
 1403 P-538022
 1404 538031 u
 1405 P-538241
 1406 P-538268
 1407 593345 wound
 1408 P-539686
 1409 Kruse throat
 1410 loc al from 1297
 1411 loc al from 1330

loc

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ave

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Caten - Marguette

	loc	cello	Suc.	CK	mal	SM	SRP
1425	27c	+?	+	-	+	P	
1426	35f	+	+	+	+	S	
1427	38g	+	+	+	+	P	
1428	38c	+	+	+	+	P	
1429	38d	+	+	+	+	P	
1430	46f	+	+	+	+	S	
1431	51d	+	+	+	+	R	
1432	55d	+	+	+	+	S	
1433	55c	-	+	+	+	S	
1434	57d	-	+	+	+	S	
1435	58d	-	+	+	+	S	
1436	58e	-	+	+	+	S	
1437	58f	-	+	+	+	S	
1438	59f	-	+	+	+	S	
1439	66g	-	+	+	+	S	
1440	66c	-	+	+	+	S	
1441	66d	-	+	+	+	S	
1442	66e	-	+	+	+	S	
1443	66f	-	+	+	+	S	
1444	69f	-	+	+	+	S	
1445	84d	-	+	+	+	P	
1446	84g	-	+	+	+	R	
1447	84d	-	+	+	+	R	
1448	84f	-	+	+	+	R	
1449	85d	-	+	+	+	S	
1450	85c	-	+	+	+	S	
1451	85d	-	+	+	+	S	
1452	85e	-	+	+	+	S	
1453	86g	-	+	+	+	S	
1454	86e	-	+	+	+	S	
1455	89b	-	+	+	+	S	
1456	89d	-	+	+	+	S	
1457	89f	-	+	+	+	S	
1458	90c	-	+	+	+	S	
1459	90f	-	+	+	+	S	
1460	91c	-	+	+	+	S	
1461	91d	-	+	+	+	S	
1462	91e	-	+	+	+	S	
1463	91f	-	+	+	+	S	
1464	94b	-	+	+	+	R	
1465	94c	-	+	+	+	R	
1466	94d	-	+	+	+	S	
1467	94g	-	+	+	+	S	
1468	95b	-	+	+	+	S	
1469	95c	-	+	+	+	S	
1470	95f	-	+	+	+	S	
1471	96d	-	+	+	+	S	
1472	96f	-	+	+	+	S	
1473	98a	-	+	+	+	S	
1474	98g	-	+	+	+	S	
1475	98c	-	+	+	+	S	
1476	98d	-	+	+	+	S	
1477	98e	-	+	+	+	S	
1478	99a	+	+	+	+	S	
1479	99aa	+	+	+	+	S	

questionable + form
large, spreading light
colored culprits (?)

142) - on rectangle
(3-9-52) of ^{not} equal
numbers in all 4 quadrilaterals -
rows and coloum. No small -

Cattin - Marguerite

transposed?

#		lac	cells	Suc	C/S	mol	SM	SRP	
1480	99c	(+)	+	+	+	+	S		
1481	99d	+, +	+	+	+	+	R		
1482	99e	+,-??	+	+	+	+	S		
1483	100B	sl	+	+	+	+	R		
1484	100ccc	sl	+	+	+	+	R		
1485	101d	sl	+	+	+	+	R		
1486	101e	sl	+	+	+	+	R		
1487	101f	sl	+	+	+	+	R		
1488	102B	sl	+	+	+	+	R		
1489	102d	sl	+	+	+	+	R		
1490	102e	sl	+	+	+	+	R		
1491	102g	+	-	-	-	-	R		
1492	103	+	-	-	-	-	S		
1493	103e	Mtg	+	+	+	+	S		
1494	105a	+	+	+	+	+	S		
1495	105B	+	+	+	+	+	S		
1496	105c	+	+	+	+	+	S		
1497	105d	+	+	+	+	+	S		
1498	105e	(+) +	+	+	+	+	S		
1499	105f	+	+	+	+	+	S		
1500	106B	+, +	+	+	+	+	S		
1501	106c	+	+	+	+	+	S		
1502	106d	+	+	+	+	+	S		
1503	106e	+	+	+	+	+	S		
1504	106f	+	+	+	+	+	S		
1505	107a	+	+	+	+	+	S		
1506	107c	+	+	+	+	+	S		
SL 1507	107d	+	+	+	+	+	S		
1508	107e	+	+	+	+	+	S		
1509	108B	+	+	+	+	+	S		
1510	108c	+	+	+	+	+	S		
1511	108d	+	+	+	+	+	S		
1512	108e	+	+	+	+	+	S		
1513	108f	+	+	+	+	+	S		
1514	109B	+	+	+	+	+	S		
1515	109c	+	+	+	+	+	S		
1516	109d	+	+	+	+	+	S		
1517	109e	+	+	+	+	+	S		
1518	110f	+	+	+	+	+	S		
1519	110c	no gr.	-	-	-	-	S		
1520	110d	+	-	-	-	-	S		
1521	110e	+	-	-	-	-	S		
1522	110f	+	-	-	-	-	S		
1523	111a	+	-	-	-	-	S		
1524	111c	(-)	-	-	-	-	R		
1525	111d	(+)	-	-	-	-	P		
1526	111e	-	-	-	-	-	P		
1527	111f	-	-	-	-	-	P		
1528	112ff	(+)	-	-	-	-	S		
1529	112c	(+)	-	-	-	-	S		
1530	112d	(+)	-	-	-	-	S		
1531	112e	(+)	-	-	-	-	S		
1532	112f	(+)	-	-	-	-	S		
1533	113f	(+)	-	-	-	-	S		
1534	113c	(+)	-	-	-	-	S		

ca 200+; several -(?)

15+, also background of small + colonies

WY (18/17)

3+, 2 -(?)

WY

11+, 6-
turbid

1-

15+
22+
6+

turbid

turbid

shows plaque

1-

1+, 16-

6-

Replated to S, ac SM, 16 lac + 1 lac -

all lac +,

5-

5+

ca 50+

(WY 18/17 used)

* One culture short between 1536 and 1537;
missing culture provisionally assumed to be 1537 (113f) 776

Cattau - Marquette

		<u>lac</u>	<u>cello</u>	<u>Suc</u>	<u>CK</u>	<u>mel</u>	<u>SM</u>	<u>SRP</u>			
1535	113d	+	-	+?	-	+	S				
1536	113e	+	-	-	-	+	S				
1537	113f	sl	-	-	-	+	S				
1538	114d	-	+	-	-	+	S				
1539	114f	-	+	-	-	+	S				
1540	115e	-	+	-	-	+	S				
1541	115d	-	+	-	-	+	S				
el	(1542)	115e	-	sl	-	-	S				
1543	115f	-	+	-	-	-	S				
1544	116b	-	+	-	-	-	S				
(1545)	116c	-	+	-	-	-	S				
1546	116d	-	+	-	-	-	S				
1547	116e	-	+	-	-	-	S				
1548	116f	-	+	-	-	-	S				
1549	117a	-	+	+as?	-	-	S				
1550	117b	-	+	+as?	-	-	S				
1551	117c	-	+	+as?	-	-	S				
(1552)	117f	-	+	+as?	-	-	S				
1553	118b	-	+	+as?	-	-	S				
(1554)	118c	-	+	+as?	-	-	S				
1555	118d	-	+	+as?	-	-	S				
1556	118e	-	+	+as?	-	-	S				
1557	118f	-	+	+as?	-	-	S				
1558	119b	-	+	+as?	-	-	S				
1559	119c	-	+	+as?	-	-	S				
(1560)	119d	-	+	+as?	-	-	S				
1561	119e	-	+	+as?	-	-	S				
(1562)	119f	-	+	+as?	-	-	S				
1563	120a	-	+	+as?	-	-	S				
1564	120b	-	+	+as?	-	-	S				
1565	120d	-	+	+as?	-	-	S				
1566	124c	-	ng	sl	-	-	P-S	# no-	all lac	Reacts w/ all lac	all cross
(1567)	125c	-	ng	sl	-	-	S				
1568	126b	-	ng	sl	-	-	S				
1569	127b	-	ng	sl	-	-	S	# no-	all lac	Reacts w/ all lac	all cross
(1570)	127c	-	ng	sl	-	-	S				
1571	127d	-	ng	sl	-	-	S				
1572	127e	-	ng	sl	-	-	S				
1573	128b	-	ng	sl	-	-	S				
(1574)	128d	-	ng	sl	-	-	S				
(1575)	129a	-	ng	sl	-	-	S				
1576	129c	-	ng	sl	-	-	S				
1577	129e	-	ng	sl	-	-	S				
(1578)	129f	-	ng	sl	-	-	S				
1579	130b	-	ng	sl	-	-	S				
1580	130c	-	ng	sl	-	-	S				
1581	130d	-	ng	sl	-	-	S				
1582	130e	-	ng	sl	-	-	S				
1583	131b	-	ng	sl	-	-	S				
1584	131f	-	ng	sl	-	-	S				
1585	132b	-	+	sl	-	-	S	0	all lac	Reacts w/ all lac	all cross
1586	132c	-	+	sl	-	-	S	0	all lac	Reacts w/ all lac	all cross
1587	132d	-	+	sl	-	-	S	0	all lac	Reacts w/ all lac	all cross
1588	132e	-	+	sl	-	-	S	0	all lac	Reacts w/ all lac	all cross
1589	133b	n.g.	+	sl	-	-	S	0	all lac	Reacts w/ all lac	all cross

3 components from 1482 all dark cells +

1482 a : lac +, small colonies

1482 b : lac +, large colonies

1482 c : lac +, extremely gummy

1524 pinpoint colonies - may
be +, but too small to tell.

Cattin - Marquette

	<u>lac</u>	<u>cello</u>	<u>am</u>	<u>CK</u>	<u>mal</u>	<u>SM</u>	<u>SRP</u>	
1590	133c	-	I+	±	+	R		
1591	133d	+	I+	+	+	S		
1592	133e	+	I+	+	+	S		
1593	133f	-	I+	±	+	R		
1594	135-a	(+) + al	I+	+	+	R		
1595	135c	+	I+	+	+	S		
1596	135d	(+)	+ al	+	+	S		
1597	135-e	(+)	+ al	+	+	R		
1598	135-f	(+)	+ al	+	+	R		
1599	137af	+ mm	+	+	+	S	0	
1600	138d	+ mm	-	-	-	S	1	1 mm
1601	139a	+ g	-	-	-	S	0	
1602	140b	+	-	-	-	S	0	
1603	140c	+ mm	-	-	-	S	1-	lac+
1604	140d	+ mm	-	-	-	S	0	
sl 1605	140e	+ mm	-	-	-	S	#+/-?	Appear lac+ + lac- on replica to Slce SM lac- (?)
1606	140f	+ mm	-	-	-	S	1-	lac- (?)
1607	140g	+ mm	-	-	-	S	0	repeated C on left
sl 1608	140h	+ mm	-	-	-	S	17/20+	About same proportion lac- / lac+
1609	141a	+ g	-	-	-	S	1	
1610	142a	± g	-	-	-	S	1 mm	
1611	142b	+ g	-	-	-	S	3-	
1612	142c	± g	-	-	-	S	30+	1- others n.g.
1613	143b	+	-	-	-	S	0	All lac+
1614	143c	+ mm	-	-	-	S	7-	all lac+
1615	143d	n.s.	-	-	-	S	2-	lac+ &
1616	143e	+ mm	-	-	-	S	0	
1617	143f	+	-	-	-	S	0	
1618	143g	+ mm	-	-	-	S	0	
1619	145b	+ mm	-	-	-	S	0	
sl 1620	145c	+	-	-	-	S	7+/1-	7+/1- (?)
sl 1621	145d	+ mm	-	-	-	S	10+/1-	all lac+
sl 1622	145e	+	-	-	-	S	3+/6-	5 lac+; 4 failed to grow
sl 1623	145f	+ mm	-	-	-	S	4+/1-	1 lac+; 1 lac-
1624	147a	+ mm	-	-	-	S	0	
1625	147b	+	-	-	-	S		
1626	147d	+	-	-	-	S		
1627	147e	+	-	-	-	S		
1628	147f	+	-	-	-	S		
1629	147g	+	-	-	-	S		
1630	148a	sl	-	-	-	S		
1631	148b	sl	-	-	-	S		
1632	149a	+	-	-	-	S		
1633	149c	+	-	-	-	S		
1634	149d	+	-	-	-	S		
1635	149f	+	-	-	-	S		
1636	150c	+	-	-	-	S		
1637	150d	+	-	-	-	S		
1638	150e	+	-	-	-	S		
1639	150f	+ mm	-	-	-	S	ca 100+	
1640	150g	+ mm	-	-	-	S	Appeared SR in cross	
1641	151a	+	-	-	-	S	9+, 3- (?)	
1642	151b	+	-	-	-	S	1+	
1643	152a	+	-	-	-	S		
1644	152b	+	-	-	-	S		

Cattin - Marquette

		<u>loc</u>	<u>cello</u>	<u>sue</u>	<u>CK</u>	<u>mal</u>	<u>SM</u>	<u>SRP</u>	
✓	1645	153a	+	-	-	±	S	A	
✓	1646	153c	+	-	-	±	S		Periperal gr; also 1- in center
✓	1647	153z	153m	+ + 153m	-	-	S	A	
✓	1648	153f	153m	+ + 153m	-	-	S	A	
✓	1649	153g	+ +	-	-	-	S	A	
✓	1650	154g	+, Ad	-	-	-	R		
✓	1651	154e	+, Ad	-	-	-	R		
✓	1652	154f	m.g.	-	-	-	R		
✓	1653	154g	+ +	-	-	-	S		appeared SP in cross
✓	1654	155c	+	-	-	-	S	A	
✓	1655	155d	m.g.	-	-	-	S		
✓	1656	155e	+ +	-	-	-	S		
✓	1657	155f	m.g.	-	-	-	S		
✓	1658	155g	m.g.	-	-	-	S		
✓	(1659)	156a	+ +	-	-	-	S		ca 100 +, 2 gummy
✓	1660	156f	+	-	-	-	R		
✓	1661	156d	+	-	-	-	S		1+
✓	1662	157g	-	-	-	-	S		
✓	(1663)	157c	+	-	-	-	S		25+, 5-
✓	1664	158f	+ + 158m	-	-	-	S		(W 1885) strong cohesion; many separate series of wsgs in each zone
✓	1665	158c	+	-	-	-	S		
✓	(1666)	158d	+	-	-	-	S		711+, 20- Recheck 50+, 45-
✓	(1667)	158e	+	-	-	-	S		5+, 9- 11+, 4-
✓	(1668)	158f	+	-	-	-	S		
✓	(1669)	158g	+	-	-	-	S		
✓	1670	159a	+ + Ad	-	-	-	R		
✓	1671	159f	+	-	-	-	S		
✓	1672	159c	+	-	-	-	S		
✓	1673	161f	+	-	-	-	S		
✓	1674	161c	+	-	-	-	S		
✓	1675	161d	+ g	-	-	-	R		
✓	1676	161e	+	-	-	-	S		
✓	1677	161f	+	-	-	-	S		
✓	1678	161g	+	-	-	-	S		
✓	(1679)	162g	+	-	-	-	S		ca 600 +
✓	(1680)	162c	+	-	-	-	S		ca 100 -
✓	(1681)	162d	+	-	-	-	S		1-
✓	1682	162e	+	-	-	-	S		
✓	1683	162f	+	-	-	-	S		
✓	1684	162g	+	-	-	-	S		
✓	1685	163g	+	-	-	-	S		
✓	1686	163c	+ g	-	-	-	S		
✓	1687	163d	+ g	-	-	-	S		
✓	(1688)	163e	+	-	-	-	S		
✓	(1689)	163f	+	-	-	-	S		
✓	1690	164f	+	-	-	-	S		
✓	1691	164c	+	-	-	-	S		
✓	(1692)	164d	+	-	-	-	S		ca 100 mal- or mal slow
✓	(1693)	165f	+	-	-	-	S		37+, 3-
✓	(1694)	165c	+	-	-	-	S		5- or slow
✓	1695	165d	+	-	-	-	S		
✓	(1696)	168f	+	-	-	-	S		32+, Recheck 1+, 1-
✓	1697	168c	+	-	-	-	S		
✓	1698	169a	+	-	-	-	S		
✓	(1699)	169b	+	-	-	-	S		

1625 - 1664

SR process done on 5 mol & 5M

by adding 1 drop regular 5M
soln to each suspension.

Strains marked * showed
ring of growth around
edge of plate where
5M was more dilute,
though center of plate
was clear. All such
growth mol +

Cullen - Marquette

		<u>lac</u>	<u>cels</u>	<u>Suc</u>	<u>CK</u>	<u>mal</u>	<u>SM</u>	<u>SRP</u>
1700	169d	+	-	+	-	+	S	75+
1701	169e	+	-	+	-	+	S	1-
1702	169f	+	-	+	-	+	S	1+
1703	169g	+	-	+	-	+	S	
1704	170a	+	-	+	-	+	S	
1705	170b	+	-	+	-	+	R	
1706	170d	+	-	+	-	+	S	
1707	171a	+	-	+	-	+	R	
1708	171c	+	-	+	-	+	R	
1709	171d	+	-	+	-	+	R	
1710	171e	+	-	+	-	+	S	
1711	172a	+	-	+	-	+	S	
1712	172c	+	-	+	-	+	S	
1713	172d	+	-	+	-	+	S	
1714	172e	+	-	+	-	+	S	
1715	172f	+	-	+	-	+	S	
1716	172g	+	-	+	-	+	S	
1717	173a	+	-	+	-	+	S	
1718	173c	+	-	+	-	+	S	
1719	173d	+	-	+	-	+	S	
1720	173da	+	-	+	-	+	S	
1721	173e	+	-	+	-	+	S	
1722	174a	+	-	+	-	+	S	
1723	174b	+	-	+	-	+	S	
1724	174c	+	-	+	-	+	S	
1725	174d	+	-	+	-	+	S	
1726	176b	+	-	+	-	+	S	
1727	176c	+	-	+	-	+	S	
1728	176d	+	-	+	-	+	S	
1729	176e	+	-	+	-	+	S	
1730	177b	+	-	+	-	+	S	
1731	177e	+	-	+	-	+	S	
1732	177f	+	-	+	-	+	S	
1733	lac+fr 1477	+	-	+	-	+	S	
1734	lac+fr 1478	+	-	+	-	+	S	
1735	lac-fr 1480	+	-	+	-	+	S	
1736	lac+d8 fr 1481	+	-	+	-	+	R	
1737	lac+fr 1482	+	-	+	-	+	S	
1738	lac+fr 1498	+	-	+	-	+	S	
1739	lac+fr 1500	+	-	+	-	+	S	
1740	lac+d8 fr 1524	+	-	+	-	+	P	
1741	lac+fr 1525	+	-	+	-	+	R	
1742	lac+rafle fr 1528	+	-	+	-	+	S	
1743	lac-fr 1529	+	-	+	-	+	S	
1744	lac-fr 1530	+	-	+	-	+	S	
1745	lac-fr 1531	+	-	+	-	+	S	
1746	" 1559	+	-	+	-	+	S	
1747	" 1560	+	-	+	-	+	S	
1748	" 1561	+	-	+	-	+	S	
1749	" 1562	+	-	+	-	+	S	
1750	" 1563	+	-	+	-	+	S	
1751	sl "	1582	+	-	+	++	S	
1752	-	1564	+	-	+	++	S	
1753	-	1673	+	-	+	++	S	
1754	-	1677	+	-	+	++	S	
1755	5-	1682	+	-	+	++	S	

			loc	alt.	Env	CK	W.E.	grn	S.R.P. 11/27/1877	
1801	Cli 05535		DR	22		+				
1802			DR	28		++	-			
1803			DR	24		+	-			
1804			DR	25		+	-			
1805			DR	26		+	-			
1806			DR	28		+	-			
1807			DR	29		+	-			
1808			DR	30		+	-			
1809			DR	31		+	-			
1810			DR	32		+	-			
1811			DR	33		+	-			
1812			DR	34		++	-			
1813			DR	36		++	-			
1814			DR	37		++	-			
1815			DR	38		++	-			
1816			DR	39		++	-			
1817			DR	40		++	-			
1818			DR	41		++	-			
1819			DR	42		++	-			
1820			DR	43		++	-			
1821			DR	44		++	-			
1822			DR	45		++	-			
1823			DR	47		++	-			
1824			DR	48		++	-			
1825			DR	49		++	-			
1826			DR	50		++	-			
1827			DR	51		++	-			
1828			DR	53		++	-			
1829			DR	54		++	-			
1830			DR	56		++	-			
1831			DR	57		++	-			
1832			DR	58		++	-			
1833	Cli 011134		DR	59		++	-			
1834	Cli 011134		DR	61		++	-			
1835			DR	62		++	-			
1836			DR	63		++	-			
1837			DR	63		++	-			
1838			DR	67		++	-			
1839			DR	68		++	-			
1840			DR	69		++	-			
1841			JL	5344		+	-			
1842	Cli 02636		DR	1		+	-			
1843			DR	2		+	-			
1844			DR	3		+	-			
1845			DR	4		+	-			
1846			DR	5		+	-			
1847			DR	6		+	-			
1848			DR	7		+	-			
1849			DR	8		+	-			
1850			DR	9		+	-			

2+ dark brown.

Then 1- dark.

1+ white.

aged b
reddish b
white b

8+ reddish.

			Lac	Cell.	Sur	Ck	Real	11/11/51)			
1857	Call 02656	AB	10	+	-	-	-	-			
1852		AB	11	+	-	-	-	-			
1853		AB	12	+	-	-	-	-			
1854		AB	13	+	-	-	-	-			
1855		AB	14	+	-	-	-	-			
1856		AB	15	+	-	-	-	-			
1857		AB	16	+	-	-	-	-			
1858		AB	17	+	-	-	-	-			
1859		AB	18	+	-	-	-	-			
1860		AB	19	+	-	-	-	-			
1861		AB	20	+	-	-	-	-			
1862	Johnson	014									
3	Smyth	0111									
4	Habicht	011									
5	Gloton	011									
6	Lindsey	033									
7	Peterson	053									
8	Robson	053									
9	Norman	053									
70	W. Wood	026									
71	Rooms.	026.	+	-	-	-	-	-			

Logos - Below in Room

$2665 = 15656$
check 11/11/51 - 187000.

303

Escherichia coli 055

KLB

509

Luria broth O111

		λ type T	2	3	4	5	6	7	plate	lac	ace	glu	gal	mal	xylo	allo	ura	x1177	R-	R+
1897	8	O# Ewing # ell λ T ¹⁴⁸⁵								S	+	+	+	+	-	S	0	0	0	
8	26	805.50#67								S	+	+	+	+	-	S	0	0	0	
9	27	806.50#72								S	+	+	+	+	-	S	0	0	0	
1500	28	807.50#82								S	+	+	+	+	-	S	26+	34+	✓	
1	29	808.50#95								S	+	+	+	+	-	S	1+	0		
1	30	1332.50	+ (485)							S	+	+	+	+	-	S	+	+	✓	
2	31	1333		+						S	+	+	+	+	-	S	0	0		
3	32	1334								S	+	+	+	+	-	S	0	0		
4	33	1594								S	+	+	+	+	-	S	0	0		
5	34	5267								S	+	+	+	+	-	R				
6	35	5268 or 61								S	+	+	+	+	-	R				
7	36	5498								S	+	+	+	+	-	R				
8	37	5499	+ 1485							S	+	+	+	+	-	R				
9	38	5500								S	+	+	+	+	-	R				
10	39	5501								S	+	+	+	+	-	R				
11	40	5623								S	+	+	+	+	-	S	0	0		
12	41	5690								S	+	+	+	+	-	S	1-	0		
13	42	5918								S	+	+	+	+	-	S	0	0		
14	43	5919								S	+	+	+	+	-	S	0	0		
15	44	6170 date 2								S	+	+	+	+	-	R				
16	45	6171 "3								S	+	+	+	+	-	R				
17	46	6172 "4								S	+	+	+	+	-	R				
18	47	6238								S	+	+	+	+	-	S	1+	0		
19	48	6239								S	+	+	+	+	-	S	6	1+		
20	49	6240								S	+	+	+	+	-	R				
1	50	6241								S	+	+	+	+	-	R				
2	51	6338								S	+	+	+	+	-	R				
3	52	1795.51								S	+	+	+	+	-	S				
4	53	2092.57								S	+	+	+	+	-	R				
5	54	585.52								S	+	+	+	+	-	S				
6	55	587								S	+	+	+	+	-	S	0	0		
7	56	588	+ 1485							S	+	+	+	+	-	R				
8	57	718								S	+	+	+	+	-	R				
9	58	719								S	+	+	+	+	-	S	2+	0		
30	59	3546	- ± 1485 (diffuse)							S	+	+	+	+	-	S				
1	60	4957								S	+	+	+	+	-	S	0	0		
2	61	5927	± 1485 (diffuse)							S	+	+	+	+	-	S				
22	62	15265	{ 5261 (diffuse)							S	+	+	+	+	-	S				

Plated on SM

O29 3 Hal+

O25 8 Hal -

O51 0

Erwing C. Chi from (redacted) traces. 5/53.

All λ , λ_2 , T_1 - T_7 exist.

	Erwing		Lac.	Cello	Suc	Nal	M.H.	Xgl	112	18D	1775 loc. SN.
									S		
1933	586-52	OSS BS H'6 (epizootic N'kun).	+	-	-	-	-	+	-	0	0
4	589-52	"								0	0
5	590-52	"								0	0
6	591-52	"								0	0
7	3320-54	(Sporadic Chi).								0	0
8	3321-54	053 BS-H'10 (.. ..).								0	0
9	3701-54	053 BS-H-(.. ..).								0	0
40	3710-54	0535 H-(.. ..).								0	0
1941	121-53	O III B4 H- (Outbreak Fla)							R	—	—
2	124-53	"							R	—	—
3	128-53	"							S	—	—
4	4869-54	(Outbreak, PD.)							S	0	0
5	4870-54	"							R	0	0
6	3714-54	(Sporadic Chi).									

Note 10/56. By this series 589-52 is not futile. (771-1934). y.

776 1890

Cultures from Karakasevic,
(Yugoslavia)

7/55 DCG

776-

- 1947 82 (O_{III}-B₄)
 48 96 (O_{III}-B₄)
 49 30 R (O_{III}-B₄)
 50 V57 (O_{III}-B₄)
 51 C 173 (O_{III}-B₄)
 52 64 (O_{SS}-B₅)
 53 Od 13 (O_{SS}-B₅)
 54 92 (O_{III}-B₄)
 55 93 (O_{III}-B₄)
 56 1015 (O_{III}-B₄)
 57 Dc 173 (O_{III}-B₄)
 58 21 (O_{SS}-B₅)
 59 Da 39 (O_{SS}-B₅)
 60 Dc 99 (O₂₆-B₆)
 19 61 C 76 (O_{III}-B₆)
 62 n 26 (O_{SS}-B₅)
 63 1064 (O_{SS}-B₅)
 64 30 wf (O_{III}-B₄)
 65 V97 6 (O₂₆-B₆)
 66 V101 (O_{SS}-B₅)
 67 96 (O₂₆-B₆)
 68 V16 (O₂₆-B₆)
 69 47 (O_{III}-B₄)

AUG 17 1955

F Orobos

1970 1064 = ~~W249~~ O_{SS} B₅ H₆
 1972 972 " "

X 1177 (F-) X 1817 (F+)

o o

~~1972~~ 1971 Stolae P

" "

o 2 ^{flat} _{conical}

1973 Stolae W O_{III} B₄ -
 1974 abradum 4 O_{III} B₄ -
 1975 Anna P O_{III} B₄ -
 1976 416 O_{III} B₄ H₂

o o
102 mm ea end control
o o

OCT 12 1955
 1977 1064 bac + malt
 1978 1064 bac + malt } see letter

July 8, 1955. Resume

SRP tests on named cultures.

① Fredeq series = 776-96-108 (xW1177) kept as wgs 9, 10
W 1377, 13~~95~~ - 97 x W1177

11/17/50 B/6 W1362 W1376 W1113

11/15/51 Evening

? were 82 strains, other strains
(W1028 etc.) untested?

for first 1500, mostly only 1177
as parent.

E.M.L. Aug. 1956.

Summary of Serotyping. wg series 1-50
inclusive.

Feb. 1953. ~~Aug. 1953~~

note:

(l.e. rough)

strains omitted from table below were self agglutinable either before or after boiling or were unstable. H typing wherever it was possible to motilize the bacteria. Only in O neg. strains could K reading be obtained, during the interval that the typing was attempted. Method summarized in raw data.

Special emphasis on wg not done before by Ewing, or by Skaar.

Some reaction s only up to group.

1. O - H + (new group)

3. H - (skaar); O = 8

4. " ") O - C + H group. K present.

11. ?

12.) O-

13. morphol. rough . H: 13 + group F.

14. O-

15. H: A + C. O= 1 (12)

16. H= A + C

17 H- skaar. confirmed

18 " "

19 " " " . O -. K 19

20. H: B run down to H 7.

23 O-

25 H = 4

26 H = 1

27 H - Skaar

28 O-

29 H = C, F, G. O-

30 H = F.)) O = 27

31 H- skaar. O-

32 O-

33 H group A. 47. O 4.

35 H " E. O 21

36 H : A + C. O 9

37 2 types: L- O 4, 18. O+K+. H H D,F,G (A)

39 O = 4 (18)

40 O = 7

41 H: G, but late. O 1 - 77

43. H: 4, C, F,

44 H; C,E,F. O 26 (21)

45 O = 77

46 H+ 7? O= 76

47 H= 13, O- O- K 3 (23)

48 H: F O = 81

49 rough

O 124 group 16-20 polyv
21-25 single
5 titration series

K 60 no pools

7 32 → 1 polycl. +
sera
seach.